

In the Claims

1. (Currently Amended) A method of promoting tissue repair comprising ~~the step of~~ administering a compound which modulates ~~[[the]]~~function of beta 1 integrin to a tissue in need of repair, wherein the compound binds to the beta 1 integrin molecule in a region of amino acid residues 82 to 87 comprising residues TAEKLLK (SEQ ID NO:1) of the sequence of the mature beta 1 integrin molecule, and functional modulation of beta 1 integrin results in at least one of (i) an inhibition of the apoptotic pathway, (ii) an alteration in metalloproteinase balance or (iii) an increase in anabolism of the extracellular matrix.

2. (Cancelled)

3. (Cancelled)

4. (Previously presented) The method as claimed in claim 3 wherein the modulation of the apoptotic activity has a resultant modulation in the metalloproteinase (MMP) balance.

5. (Withdrawn) An assay method for identifying compounds suitable for use in tissue repair, said assay comprising the steps of:

- providing a candidate compound,
- bringing the candidate compound into contact with beta 1 integrin,
- determining the presence or absence of modulation of beta 1 integrin activity by the candidate compound,

wherein modulation of beta 1 integrin activity is indicative of utility of that compound in tissue repair.

6. (Withdrawn) The method of claim 5 wherein modulation of beta 1 integrin activity is assessed by monitoring variance in the MMP level.

7. (Withdrawn) The method of claim 5 wherein modulation of beta 1 integrin activity is assessed by the resulting modulation on apoptosis.

8. (Withdrawn) The method of claim 5 wherein the compound modulates the function of beta 1 integrin, wherein modulation includes a change in the function of, or the shedding of beta 1 integrin.

9. (Withdrawn) The method of claim 5 wherein the compound binds the beta 1 integrin molecule in the region of amino acid residues 82 to 87 of the sequence of the mature beta 1 integrin molecule.

10. (Withdrawn) The method of claim 5 wherein the compound binds the amino acid sequence of SEQ ID NO:1, TAEKLLK.

11. (Withdrawn) The method as claimed in claim 5 wherein the compound is a synthetic peptide.

12. (Withdrawn) The method as claimed in claim 5 wherein the compound is an antibody.

13. (Withdrawn) The compound as claimed in claim 5 wherein the compound is a humanised or chimaeric antibody.

14. (Cancelled)

15. (Previously Presented) The method according to claim 1, wherein the compound is an antibody.

16. (Previously Presented) The method according to claim 15, wherein the antibody is a monoclonal antibody produced by the commercial clone JB1a.

17. (Withdrawn) A compound identified by the method of claim 5.

18. (Withdrawn) A pharmaceutical composition for use in tissue repair wherein the composition includes as an active ingredient, a compound which modifies the function of beta 1 integrin.

19. (New) The method of claim 1, wherein the compound is a synthetic peptide.

20. (New) The method of claim 15, wherein the antibody is a humanized antibody, chimeric antibody or a human antibody.

21. (New) The method of claim 15, wherein the antibody is a fragment of the monoclonal antibody produced by the commercial clone JB1a.

22. (New) The method of claim 1, wherein the functional modulation causes shedding of the beta 1 integrin.

23. (New) The method of claim 1, wherein alteration in the metalloproteinase balance results in at least one of (i) an increase in inactive MMP9, and (ii) a decrease in MMP1.

24. (New) The method of claim 1, where functional modulation may further include an increase in TIMP1.

25. (New) The method of claim 1, wherein promotion of tissue repair is used for treating a disease where the extracellular matrix is degraded.

26. (New) The method of claim 1, wherein promotion of tissue repair is for treating lung emphysema.

27. (New) The method of claim 1, wherein promotion of tissue repair is for treating chronic obstructive pulmonary disease (COPD).